

ICOS (ANC6C6-A3): sc-65285

BACKGROUND

T cell proliferation and lymphokine production are triggered by occupation of the TCR by antigen, followed by a costimulatory signal that is delivered by a ligand expressed on antigen presenting cells. The B7-related cell surface proteins CD80 (B7-1) and CD86 (B7-2) are expressed on antigen presenting cells. CD80 and CD86 bind to the homologous T cell receptors CD28 and CTLA-4 (cytotoxic T lymphocyte-associated protein-4) and trigger costimulatory signals for optimal T cell activation. CTLA-4 shares 31% overall amino acid identity with CD28 and it has been proposed that CD28 and CTLA-4 are functionally redundant. ICOS (inducible co-stimulator) is related to CD28 and CTLA-4, and these three proteins are thought to compose a receptor family. ICOS stimulation enhances T cell responses and superinduces the synthesis of IL-10, but it does not induce IL-2 upregulation.

REFERENCES

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- Gribben, J.G., Freeman, G.J., Boussiotis, V.A., Rennert, P., Jellis, C.L., Greenfield, E., Barber, M., Restivo, V.A., Jr., Ke, X., Gray, G.S. and Nadler, L.M. 1995. CTLA4 mediates antigen-specific apoptosis of human T cells. *Proc. Natl. Acad. Sci. USA* 92: 811-815.
- Hutloff, A., Dittrich, A.M., Beier, K.C., Eljaschewitsch, B., Kraft, R., Anagnostopoulos, I. and Kroczeck, R.A. 1999. ICOS is an inducible T cell co-stimulator structurally and functionally related to CD28. *Nature* 397: 263-266.

CHROMOSOMAL LOCATION

Genetic locus: ICOS (human) mapping to 2q33.2.

SOURCE

ICOS (ANC6C6-A3) is a mouse monoclonal antibody raised against recombinant ICOS of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

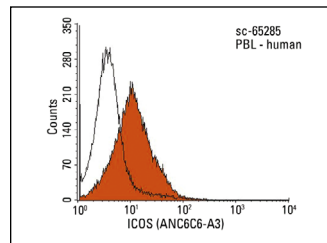
ICOS (ANC6C6-A3) is recommended for detection of ICOS of human origin by flow cytometry (1 µg per 1 x 10⁶ cells).

Suitable for use as control antibody for ICOS siRNA (h): sc-42770, ICOS shRNA Plasmid (h): sc-42770-SH and ICOS shRNA (h) Lentiviral Particles: sc-42770-V.

Molecular Weight of ICOS monomer: 27 kDa.

Molecular Weight of ICOS homodimer: 55-60 kDa.

DATA



ICOS (ANC6C6-A3): sc-65285. Indirect FCM analysis of PMA-stimulated human peripheral blood leukocytes stained with ICOS (ANC6C6-A3), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

SELECT PRODUCT CITATIONS

- Morandi, F., Ferretti, E., Bocca, P., Prigione, I., Raffaghello, L. and Pistoia, V. 2010. A novel mechanism of soluble HLA-G mediated immune modulation: downregulation of T cell chemokine receptor expression and impairment of chemotaxis. *PLoS ONE* 5: e11763.
- Ma, X., Sun, Z., Zhai, P., Yu, W., Wang, T., Li, F. and Ding, J. 2017. Effect of follicular helper T cells on the pathogenesis of asthma. *Exp. Ther. Med.* 14: 967-972.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.